

PATENT

Atty Docket No.: 10018559-2

App. Ser. No.: 10/698,725

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the amendments above and the following remarks. Claims 15 and 20 have been amended. Claims 29-34 have been added. Claims 13-20 and 29-34 are pending in the present application, of which Claims 13, 15 and 20 are independent.

No new matter has been introduced by way of the amendments or additions and entry thereof is therefore respectfully requested.

Drawings

The Official Action does not indicate whether the Drawings are objected to or accepted. Because there are no specific objections to the Drawings, Applicants will assume that the Drawings are acceptable and therefore do not require any revisions. Should this assumption be in error, the Examiner is respectfully requested to notify the Applicants in any subsequent Action.

The Examiner is also respectfully requested to provide the Applicants with an indication that the Drawings are accepted should they require no revisions.

Allowable Subject Matter

Applicants note with appreciation the indication that Claims 15-17 and 20 are objected to as being dependent upon a rejected base claim, but that such claims would be allowable if rewritten in independent form including all of the features of the base claim and any intervening claims.

By virtue of the amendments above, Claims 15 and 20 have been rewritten in independent form and incorporate all of the features of independent Claim 13 from which

PATENT

Atty Docket No.: 10018559-2

App. Ser. No.: 10/698,725

they originally depended. In this regard, it is respectfully submitted that Claims 15-17 and 20 are allowable over the cited prior art of record.

Claim Rejection under 35 U.S.C. 102

The test for determining if a reference anticipates a claim, for purposes of a rejection under 35 U.S.C. § 102, is whether the reference discloses all the elements of the claimed combination, or the mechanical equivalents thereof functioning in substantially the same way to produce substantially the same results. As noted by the Court of Appeals for the Federal Circuit in *Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984), in evaluating the sufficiency of an anticipation rejection under 35 U.S.C. § 102, the Court stated:

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.

Therefore, if the cited reference does not disclose each and every element of the claimed invention, then the cited reference fails to anticipate the claimed invention and, thus, the claimed invention is distinguishable over the cited reference.

The Official Action sets forth a rejection of Claims 13 and 14 under 35 USC 102(b) as allegedly being anticipated by U.S. Patent No. 5,736,456 to Akram ("Akram"). This rejection is respectfully traversed.

Independent Claim 13 recites a semiconductor device comprising "a substrate having a substantially planar surface and an interior sloped surface," "a wettable layer adhered to a portion of the interior sloped surface" and "a solder layer adhered to a first portion of the wettable layer."

PATENT

Atty Docket No.: 10018559-2

App. Ser. No.: 10/698,725

Akram discloses a method of forming under bump metallurgy (UBM) pads for a flip chip (Abstract; Column 3, lines 40-50). It is respectfully submitted that Akram, however, fails to disclose each and every feature recited in independent Claim 13.

Akram fails to disclose "a wettable layer adhered to a portion of the interior sloped surface" and "a solder layer adhered to a first portion of the wettable layer" as recited in independent Claim 13. In rejecting Claim 13, the Official Action refers to Figure 4e of Akram and states:

As shown in Figure 4e, the device formed comprises a substrate 56 having a substantially [planar surface and an interior sloped surface. A wettable layer 72 is adhered to the interior sloped surface. A solder layer 82 is adhered to the wettable layer.

This assertion is unsupported by the disclosure of Akram. Specifically, Akram discloses that layer 72 is formed over layer 70, as shown in Figure 4e. As such, Akram fails to disclose that layer 72 is adhered to a portion of the interior sloped surface of the layer 56. In this regard, Akram fails to disclose that layer 72 is "a wettable layer adhered to a portion of the interior sloped surface" as recited in independent Claim 13. Thus, for at least the foregoing reasons, Akram fails to disclose each and every feature of Claim 13 and thus cannot anticipate this claim.

Because Claim 14 incorporates all the features of independent Claim 13, Akram also fails to teach or suggest the features claimed in Claim 14 for at least the reasons given above. Therefore, Akram does not anticipate the subject matter of Claims 13-14. Claims 13-14 are thus allowable over Akram, and withdrawal of the rejection is respectfully requested.

Claim Rejection under 35 U.S.C. § 103

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in MPEP § 706.02(j):